REMARKS

Claims 1, 3-15, 17-29, and 31-42 are pending in the present application. By this Response, claims 1, 6, 8, 15, 20, 22, 29, 34, and 36 are amended. Claim 2, 16, and 30 are cancelled. Claims 1, 15, and 29 are amended to recite "wherein calculating a total profit includes, for each request received by the computing system for the data network site, determining whether processing of the request generates a revenue or a penalty, wherein a revenue is generated when an allocation of resources is such that the request is processed in accordance with the service level agreement and a penalty is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement, and wherein the total profit is obtained by subtracting the penalty from the revenue for each request." These features are supported at least on page 10, lines 18-25 of the current specification.

Claims 6, 20, and 34 are amended to recite "wherein each server of the web server farm accommodates a different set of classes of requests." These features are supported at least on page 11, lines 13-15 of the current specification.

Claims 8, 22, and 36 are amended to recite "wherein summing cost calculations includes summing profits and penalties of each of the separate queuing systems." These features are supported at least on page 14, lines 16-18 of the current specification.

No new matter is added as a result of the above amendments. Reconsideration in view of the above amendments of the claims and the following Remarks is respectfully requested.

I. <u>35 U.S.C § 101, Alleged Non-Statutory Subject Matter</u>

The Office Action rejects claims 1-14 and 29-42 under 35 U.S.C. § 101 because the claimed invention is directed to allegedly non-statutory subject matter. This rejection is respectfully traversed. The Office Action states:

> In the instant application, there is no significant claim recitation of the data processing system or calculating computer to show the significant change in the data or for performing calculation operations in Claim 1.
>
> In Claim 29, the computer program (or logic) itself can not be directed to a practical application of the invention in the useful art to accomplish a concrete, useful, and tangible result. When the computer program is <u>actually executed by the computer</u>, the claimed subject matter produces a useful, concrete and tangible result.

By this Response, independent claim 1 is amended to recite "A method in a data processing system of allocating resources of a computing system to hosting of a data network site to thereby maximize generated profit." Thus, independent claim 1 is now amended to include a data processing system in which the features of claim 1 are implemented. Accordingly, Applicants respectfully request the withdrawal of the rejection to claims 1 and 3-14 under 35 U.S.C. § 101.

In addition, also by this Response, independent claim 29 is amended to recite "a computer program product comprising computer executable instructions embodied in a computer readable medium for allocating resources of a computing system to hosting of a data network site to thereby maximize generated profit." Thus, the computer program product comprises computer executable instructions that may be executed by the computer. This is evidenced by page 9, lines 8-11 of the current specification, which states "the present invention may be implemented in a server, client device, stand-alone computing system, Web server farm, or the like. Accordingly, Applicants respectfully request the withdrawal of the rejection to claims 29 and 31-42 under 35 U.S.C. § 101.

II. 35 U.S.C. § 102(e), Alleged Anticipation, Claims 1, 4-15, 18-19 and 32-42

The Office Action rejects claims 1, 4-15, 18-29 and 32-42 under 35 U.S.C. § 102(e) as being anticipated by Smith (U.S. Patent Publication 2002/0091854; July 11, 2002) (hereinafter "Smith"). This rejection is respectfully traversed.

The Office Action states:

> As to Claim 1, Smith discloses a method comprising:
>
> calculating a total profit for processing requests received by the computing system for the data network site based on at least one service level agreement (see paragraphs [0013] – commission, [0014]-[0016]); and
>
> allocating resources of the computing system to maximize the total profit (see Supra paragraph [0013] – allocate resources.).

Amended independent claim 1, which is representative of claims 15 and 29 with regard to similarly recited subject matter, now recites:

1. A method in a data processing system of allocating resources of a computing system to hosting of a data network site to thereby maximize generated profit, comprising:

calculating a total profit for processing requests received by the computing system for the data network site based on at least one service level agreement; and

allocating resources of the computing system to maximize the total profit, wherein calculating a total profit includes, for each request received by the computing system for the data network site, determining whether processing of the request generates a revenue or a penalty, wherein a revenue is generated when the allocation of resources is such that the request is processed in accordance with the service level agreement and a penalty is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement, and wherein the total profit is obtained by subtracting the penalty from the revenue for each request. (Emphasis added).

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re bond*, 910 F .2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 21 U.S.P.Q.2d 1031, 1034 (Fed Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). Applicants respectfully submit that Smith does not teach every element of the claimed invention arranged as they are in claims 1, 15, and 29 of the present invention.

Specifically, Smith does not teach or suggest calculating a total profit for each request received by the computing system for the data network site by determining whether processing of the request generates a revenue or a penalty, wherein a revenue is generated when the allocation of resources is such that the request is processed in accordance with the service level agreement and a penalty is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement, and wherein the total profit is obtained by subtracting the penalty from the revenue for each request.

As discussed in the Abstract, Smith teaches a method for operating a commissioned e-commerce service provider that provides services to businesses on a computerized network such as the Internet in exchange for a small commission on the commercial transactions generated using those services. Unlike most ISPs that provide services to individuals and businesses, the commissioned e-commerce provider preferably provides Internet services required to host a Web site or operate and e-commerce site, the business contracts with the commissioned e-commerce service provider to provide these services based on receiving a percentage commission of the commercial transactions generated using these services. Preferably, the commission percentage is tiered in accordance with the amount of traffic at the site to provide a nominal level of service at a lower commission rate, yet allow for an exceptional volume of traffic to be accommodated by the site at a higher commission rate without having the site fail or the service become overwhelmed.

However, Smith does not teach or suggest that <u>a total profit is calculated by determining whether processing of the request generates a revenue or a penalty, wherein a revenue is generated when the allocation of resources is such that the request is processed in accordance with the service level agreement and a penalty is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement</u>. The Office Action alleges that Smith teaches calculating a total profit in paragraphs 13-16, wherein Smith teaches generating a 3-tier commission percentage for service providers to provide services. The base tier of the commission percentage is in relation to anticipate or actual average usage of services as measured against volume of commercial transactions during this average usage. The second tier is at a predetermined increase above the base-tier in the event that immediate usage exceeds a first predefined level above the average usage. The third tier is at a predetermined increase above the second tier in the event that immediate usage exceeds a second predefined level above the average usage (paragraph 14).

Thus, the commission percentage of Smith is merely tiered by determining <u>how far the immediate usage of services exceeds the average usage of services</u>. As described in paragraph 15, by providing the 3-tier commission percentage, a customer benefits from the business method, because the commission part of the fee is based on at least one

attribute related to host server service usages rather than a fixed fee charged "by the box" (by the server unit). However, the commission percentage as taught by Smith is not tiered by determining whether processing of the request generates a revenue or a penalty, wherein the revenue is generated when resource allocation is such that the request is processed in accordance with the service level agreement and wherein a penalty is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement. Contrary to determining whether a revenue or a penalty is generated, Smith tiers the commission percentage in accordance with the amount of traffic at the site or average usage to provide a nominal service level at a lower commission rate or to provide an exceptional service level at a higher commission rate (paragraph 13).

While in paragraphs 63 and 66, Smith teaches the 3 tiers of the commission percentage as three different service level agreement arrangements for a given customer account, Smith still does not teach determining whether processing of the request generates a revenue or a penalty, with a revenue that is generated when the allocation of resources is such that the request is processed in accordance with the service level agreement and a penalty that is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement. In paragraph 66, Smith merely teaches that with the 3 tiers of the commission percentage provided as service level agreement arrangements, customers may be charged for a higher rate for the period of time that additional usage was required. Smith does not teach or suggest generating revenue when the processing of requests is in accordance with the service level agreement or generating a penalty when the processing of requests is not in accordance with the service level agreement.

In fact, Smith is only concerned with providing the 3-tier commission percentage for a given customer account, such that the customer may be charged according to the server usage instead of a fixed fee "by the box". Smith is not concerned with how well the processing of requests is in accordance with the service level agreement. Therefore, Smith does not and would not teach determining whether processing of the request generates a revenue or a penalty, with a revenue that is generated when the allocation of resources is such that the request is processed in accordance with the service level

agreement and a penalty that is generated when the allocation of resources is such that the request is not processed in accordance with the service level agreement, as recited in amended claims 1, 15, and 29 of the present invention.

In addition, Smith does not teach or suggest that <u>the total profit is obtained by subtracting the penalty from the revenue for each request</u>. Since Smith does not teach or suggest whether processing of the request generates a revenue or a profit, Smith does not and would not teach obtaining a total profit by subtracting the penalty from the revenue for each request. To the contrary, Smith teaches away from obtaining a total profit by subtracting the penalty from the revenue for each request by specifically teaching tiering the commission percentage based on the average usage of services (paragraph 13-14). Thus, contrary to obtaining a total profit by subtracting penalty from revenue for each request, which represents how well the requests are processed in accordance with the service level agreement, Smith establishes the commission percentage by measuring how far the immediate usage exceeds the average usage, such that the customer is charged a higher rate for the additional usage. Nowhere in the reference does Smith teach or suggest obtaining a total profit by subtracting the penalty from the revenue, because Smith is only interested in charging the customer based on the 3-tier commission percentage, instead of maximizing a total profit for processing requests in a computing system. Therefore, Smith fails to teach or suggest the features of amended claims 1, 15, and 29 of the present invention.

Furthermore, the Office Action <u>admits</u>, in the rejections of claims 2 and 3 on page 12, that Smith does not expressly disclose generating profit when allocation of resources is processed in accordance with the service level agreement or generating a penalty when the allocation of resources is not processed in accordance with the service level agreement. However, the Office Action alleges that since customer service is a key factor in the success of any business and the most common way to encourage the service sector to improve the customer service by rewarding them when the service is satisfactory and giving penalty for the poor service, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the alleged well known steps of rewarding the service provider for the satisfactory service and

punishing them for the poor service for the purpose of providing effective customer service. Applicants respectfully disagree.

There is no teaching or suggestion in Smith of generating a revenue when the processing of requests is in accordance with the service level agreement or a penalty when the processing of requests is not in accordance with the service level agreement. There is also no teaching or suggestion of subtracting the penalty from the revenue to obtain a total profit in Smith. Smith merely teaches generating a 3-tier commission percentage based on the average usage of services, such that the customer is charged at a higher rate for additional usage. Nowhere in the reference does Smith teach or suggest rewarding service providers when the service is satisfactory or punishing them if the service is poor. Smith is only concerned with providing a nominal level of service at a lower commission rate and an exceptional level of service at a higher commission rate (paragraph 13). Smith is not concerned with rewarding or punishing service providers based on whether the service is satisfactory or poor, as alleged by the Examiner.

To the contrary, Smith provides 3-tier commission percentage that rewards the customer, instead of the service providers, if the usage is low by charging a lower commission rate, or punishes the customer if the usage is high by charging a higher commission rate. Therefore, a person of ordinary skill in the art would not have been led to modify Smith's teaching to reach the presently claimed invention, because instead of rewarding or punishing the service providers as alleged by the Examiner, Smith's 3-tier commission percentage would reward or punish the customer. Therefore, one of ordinary skill in the art would not be led to modify Smith to reach the presently claimed invention in addition to Smith's failure to teach or suggest the features of amended claims 1, 15, and 29 of the present invention.

In view of the above, Applicants respectfully submit that Smith does not teach or suggest the features of amended claims 1, 15, and 29. At least by virtue of their dependency on amended claims 1, 15, and 29 respectively, Smith does not teach or suggest the features of dependent claims 4-14, 18-28, and 32-42. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1, 4-15, 18-29, and 32-42 under 35 U.S.C. § 102(e).

In addition, Smith also does not teach or suggest the specific features of dependent claims 4-14, 18-28, and 32-42. For example, with regard to amended dependent claim 8, which is representative of claims 22 and 36 with regard to similarly recited subject matter, Smith does not teach or suggest <u>modeling the resource allocation as a queuing network; decomposing the queuing network into separate queuing systems; and summing cost calculations for each of the separate queuing systems, wherein summing cost calculations includes summing profits and penalties of each of the separate queuing systems</u>.

The Office Action alleges that Smith teaches these features in paragraph 14, where Smith teaches the 3-tier system. However, in paragraph 14, Smith merely teaches the 3-tier commission percentage model that calculates a commission percentage by measuring how far the immediate usage is above the average usage. Smith does not teach or suggest a queuing model for allocation of resources. The Office Action interprets Smith's 3 tiers as separate queuing systems that form the queuing network. However, Smith's 3 tiers are merely levels of usage that are used to determine how much a customer should be charged. Smith's 3 tiers are not separate queuing systems that form a queuing network for modeling resource allocation. Smith is not concerning with allocating resources using a queuing network. Smith is only concerned with charging customers a commission percentage that corresponds to a level of their usage above the average usage. Therefore, Smith does not teach or suggest the feature of amended claims 8, 22, and 36 of the present invention.

In addition, Smith does not teach or suggest <u>summing cost calculations includes summing profits and penalties of each of the separate queuing systems</u>. As discussed above in arguments presented for claims 1, 15, and 29, Smith does not teach or suggest generating revenue or penalty when the processing of the request is or is not in accordance with the service level agreements. Therefore, Smith does not and would not teach <u>summing profits and penalties of each of the separate queuing systems</u> as recited in amended claims 8, 22, and 36 of the present invention.

In view of the above, in addition to their dependency on amended claims 1, 15, and 29, Applicants respectfully submit that Smith also fails to teach or suggest the specific feature of claims 4-14, 18-28, and 32-42. Accordingly, Applicants respectfully

request the withdrawal of the rejection to claims 4-14, 18-28, and 32-42 of the present invention.

III. 35 U.S.C. § 103(a), Alleged Obviousness, Claims 2-3, 16-17, and 30-31

The Office Action rejects claims 2-3, 16-17 and 30-31 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Smith (U.S. Patent Publication 2002/0091854; July 11, 2002). This rejection is respectfully traversed.

Smith does not teach or suggest the features of claims 1, 15, and 29 from which claims 2-3, 16-17 and 30-31 depend. As discussed above in arguments presented for amended claims 1, 15, and 29, Smith does not teach or suggest generating a revenue when the processing of requests is in accordance with the service level agreement, or generating a penalty when the processing of requests is not in accordance with the service level agreement. Smith also does not teach or suggest <u>a cost model that in which profit is gained for each request to the data network site that is processed in accordance with a service level agreement and a penalty that is paid for each request to the data network site that is not processed in accordance with a service level agreement</u>, as recited in claims 3, 17, and 31 of the present invention.

The Office Action admits that Smith does not expressly disclose generating profit when allocation of resources is processed in accordance with the service level agreement or generating a penalty when the allocation of resources is not processed in accordance with the service level agreement. However, the Office Action alleges that since customer service is a key factor in success of any business and the most common way to encourage the service sector to improve the customer service by rewarding them when the service is satisfactory and giving penalty for the poor service, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the alleged well known steps of rewarding the service provider for the satisfactory service and punishing them for the poor service for the purpose of providing effective customer service. Applicants respectfully disagree.

Smith teaches a 3-tier commission percentage model that is used for charging customers a higher rate for nominal service level and a lower rate for exceptional service level. Smith does not teach or suggest a cost model that generates a profit when a request

is processed in accordance with the service level agreement and a penalty when a request is not processed in accordance with the service level agreement. As discussed above in arguments presented for amended claims 1, 15, and 29, Smith is not concerned with how well the processing of the request meets the service level agreement. Smith is only concerned with how the customer is charged based on the service usage. In addition, Smith neither rewards nor punishes the service provider for meeting the service level agreement. To the contrary, Smith rewards or punishes the customer based on how far the server usage exceeds the average usage. Therefore, a person of ordinary skill in the art would not have been led to modify Smith's 3-tier commission percentage model to reach the cost model of the presently claimed invention, because not only does Smith fail to teach the features of claims 3, 17, and 31, Smith also does not reward the service provider for satisfactory service and punish them for the poor service for the purpose of providing effective customer service, as alleged by the Examiner.

In view of the above, in addition to their dependency on amended claims 1, 15, and 29, Applicants respectfully submit that Smith fails to teach or suggest the features of claims 3, 17, and 31 of the present invention. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 3, 17, and 31 under 35 U.S.C. § 103(a).

IV. Conclusion

It is respectfully urged that the subject application is patentable over Smith and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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